T3

Operation Guide

v1.0

T3

Universal System Controller

FEDERAL COMMUNICATIONS COMMISSION NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC ID: MMURTI0300

CAN: 3166-RTI0300

BATTERY DISPOSAL

For environmental reasons, your *T3* universal system controller uses "environmentally sound" Lithium-ion rechargeable batteries. These batteries do not contain any poisonous heavy metals that can damage the environment.

In the interest of recycling, please do not dispose of these batteries in the household waste at the end of their useful life. Instead, dispose of them at an appropriate collection site.

SAFETY SUGGESTIONS

Read Instructions. Read all safety and operating instructions before operating the unit.

Heat. Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.

Power Sources. Connect the docking station only to the power supply that was included with the unit. Recharge the battery only with the docking station that was included with the unit.

Power Cord Protection. Route power supply cords so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to the cords at power receptacles and at the point at which they exit from the unit.

Nonuse Periods. Unplug the power supply from the outlet when the unit is to be left unused for a long period.

Water and Moisture. Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.

Object and Liquid Entry. Do not allow objects to fall or liquids to be spilled into the enclosure through openings.

Cleaning. The unit should be cleaned only as recommended in the operating guide.

Servicing. Do not attempt any service beyond that described in the operating guide. Refer all other service needs to qualified service personnel.

Damage Requiring Service. The unit should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit does not appear to operate normally or exhibits a marked change in performance.

LIMITED WARRANTY

Remote Technologies Incorporated warrants its products for a period of one (1) year from the date of purchase from Remote Technologies Incorporated or an authorized Remote Technologies Incorporated distributor.

This warranty may be enforced by the original purchaser and subsequent owners during the warranty period, so long as the original dated sales receipt or other proof of warranty coverage is presented when warranty service is required.

Except as specified below, this warranty covers all defects in material and workmanship in this product. The following are not covered by the warranty:

Damage resulting from:

1. Accident, misuse, abuse, or neglect.
2. Failure to follow instructions contained in this Guide.
3. Repair or attempted repair by anyone other than Remote Technologies Incorporated.
4. Causes other than product defects, including lack of skill, competence or experience of user.
5. Shipment of this product (claims must be made to carrier).
6. Being altered or which the serial number has been defaced, modified or removed.

Remote Technologies Incorporated is not liable for any damages caused by its products or for its failure of its products to perform, including any lost profits, lost savings, incidental damages, or consequential damages.

Remote Technologies Incorporated is not liable for damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made by you for a third party.

Remote Technologies Incorporated's liability for any defective product is limited to repair or replacement of the product, at our option.

If your *T3* needs service, please contact Remote Technologies Incorporated by telephone, fax or e-mail for return information. ***Please do not return products to RTI without return authorization.***

DISCLAIMER

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Chapter 1. Welcome

Thank you for purchasing the *T3* universal system controller. The *T3* combines the power and flexibility of a graphic LCD touchscreen with an ergonomic design that permits effortless one-handed operation. This design overcomes the need for a compromise between form and function. Sleek and perfectly balanced, the *T3* is infinitely flexible and expandable.

The *T3* takes complete control of the home theater, replacing all other remotes. It features an intuitive, easy to read color LCD that can display custom buttons, text, graphics, symbols, and icons. In addition to the backlit display, 16 "Hard" keypad buttons allow easy access to frequently used functions.

Programming is easy and convenient thanks to the Windows® based *TheaterTouch Designer*™ software. Because RTI's remote control products are sold only through professional installers/programmers, and never directly to consumers, it is our philosophy to not incorporate programming capability directly into our products. Instead, we are committed to providing our dealers with the hardware and software tools that allow them to create re-usable programming databases and templates in the most efficient and reliable way possible.

The *T3* is capable of both infrared and radio frequency output. Optional RF receivers are available for transmission through walls and cabinets. The RF receivers connect to an RTI control system for the ultimate in control reliability and flexibility. RTI control systems provide many advanced features such as IR routing, local macro execution, power sensing, and RS-232 control.

COMPATIBILITY NOTE

The *T3* and *TheaterTouch Designer* software are compatible with infrared (IR) commands with carrier frequencies between 15KhZ and 460KhZ, as well as those commands that do not use a carrier. This covers virtually all of the remotes that exist to date.

UNPACKING AND INSPECTION

After unpacking your new *T3* universal system controller, save all of the packing materials in case you ever have to ship the unit.

Thoroughly inspect the *T3* and packing materials for signs of damage. Report any damage to the carrier immediately. Report any equipment malfunctions to Remote Technologies Incorporated or an authorized Remote Technologies Incorporated distributor.

PRODUCT CONTENTS

Contents within the box include the following items:

- One (1) *T3* universal system controller
- One (1) Docking station.
- One (1) Universal power supply for docking station
- One (1) Operation guide.

SOFTWARE REQUIREMENTS

The recommended minimum system requirements needed to run the *TheaterTouch Designer* software are as follows:

- Windows 98SE®, Windows ME®, Windows 2000®, Windows XP® or later version.
- A free USB port.
- At least 64 Megabytes of RAM.
- At least 100 Megabytes of free disk storage.
- Screen resolution of 800x600 with 16-bit color.
- A mouse is required.
- Optional printer for printing reports.

Chapter 2. Introduction

FEATURES

The *T3* provides superior quality and reliability as well as these specific features:

- A replacement for all of the remote controls in a home theater. The *T3* can reproduce all of the commands of almost any other infrared remote control.

- A programmable graphic display. The *T3* uses powerful Windows® based software that makes it easy to place buttons, text, graphics, symbols and icons anywhere on the display.

- A full color, high-contrast TFT LCD with bright white backlight. The display's transflective screen makes it easy to read in any lighting condition – even in sunlight.

- A reliable, high-resolution resistive touchpanel.

- 16 backlit "hard" keypad buttons that allow easy access to frequently used functions.

- A light-weight, low-profile Lithium Ion rechargeable battery pack. The *T3* can run continuously for several hours between charges. Because the remote is normally used only a few minutes per session, the unit typically will run for a week or more between charges. A built-in low battery indicator warns you when it's time to recharge the battery.

- A macro function. This feature allows the *T3* to perform a series of commands by pressing a single button. For example, you can create a macro called "Movie" that turns on the TV, sets the correct input, turns on the DVD player, dims the lights, and starts playing a movie.

- Both infrared (IR) and radio frequency (RF) output options. You can even use both options on the same unit.
- A built in motion sensor can automatically turn the unit on when it is picked up.
- A USB port for communication with the *TheaterTouch Designer* programming software.
- Non-volatile flash memory. The *T3* will not lose any programmed data when the battery is removed.
- One-year parts and labor warranty
- Available only to system integration professionals.

IMPORTANT NOTES

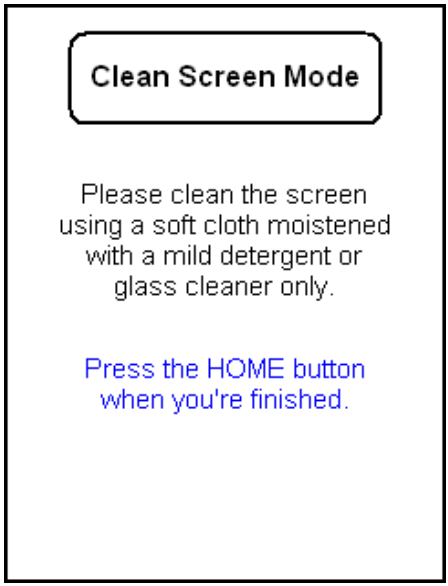
Please read these important notes about the *T3:*

- The *T3* should be placed in an area where it is around normal room temperature (between 60°F to 90°F). If the temperature is too hot, the display appears dim. If the temperature is too cold, the display appears dark and may respond slowly.
- Do not use sharp objects on the touchscreen. It is designed to operate with a touch of your finger.
- Do not let the *T3* get wet. It should not be handled with wet hands or placed in an area where it could get wet.
- Do not subject the *T3* to smoke, dust, or vibrations. The display may be damaged from excessive shock or vibration.
- Only use the power supply that is provided with the *T3*. Using the wrong type of power supply may result in damage to the battery or electronic components.

- Do not disassemble the unit. Service of the *T3* should be performed by authorized personnel only.

CLEANING

Occasional cleaning may be required, depending on use. It is recommended that you create a "Clean" button somewhere on the Home page of the *T3*. This button should link to a page that does not contain commands or macros that could be inadvertently executed while cleaning the unit. The "Clean" page could contain a text message or graphic of your choosing such as:


Clean Screen Mode
Please clean the screen using a soft cloth moistened with a mild detergent or glass cleaner only.
Press the HOME button when you're finished.

To clean your *T3,* lightly dampen a lint-free cloth with a glass cleaner or mild detergent, and wipe the touchscreen, keypad and outer surfaces.

BATTERY AND DOCKING STATION

The *T3* uses a Lithium-Ion rechargeable battery. This battery does not exhibit any type of "Memory Effect" from being charged too

often. Since the *T3* can safely be charged after each use, a docking station is included for convenience. If left out of the docking station, the *T3* will remain in sleep mode for 1 – 2 months before shutting down. At that point the battery must be recharged.

The *T3* Docking Station can be placed on a flat surface such as a shelf or table, or it can be mounted to a wall using the mounting holes on the back of the unit.

If the *T3* battery capacity is reduced to approximately 25 percent, a low battery icon will appear in the top center of the display:

The low battery icon will change color to red if the battery capacity becomes critically low:

At this point the *T3* must be placed into the docking station to recharge the battery.

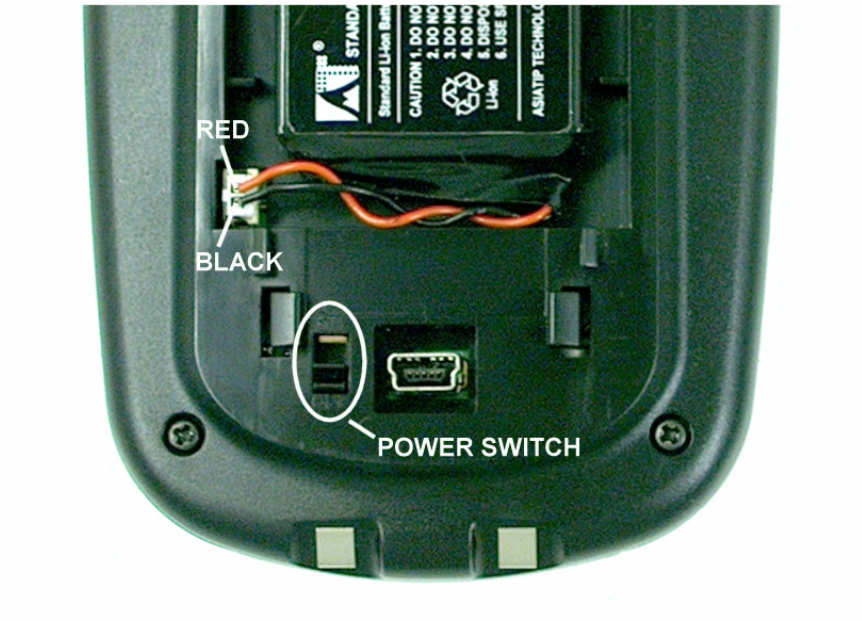
The docking station LED illuminates to indicate a charge in progress. The LED will turn off when the battery in the unit is fully charged.

A fully discharged battery will take approximately 2-4 hours to completely re-charge.

The *T3* can remain in the docking station indefinitely without damage to the battery.

GETTING STARTED

Start by inserting the battery connector into the mating plug on the *T3*. Make sure the connector is oriented properly before attempting to insert it. Next, turn the unit on by sliding the power switch into the "ON" position (toward the battery).

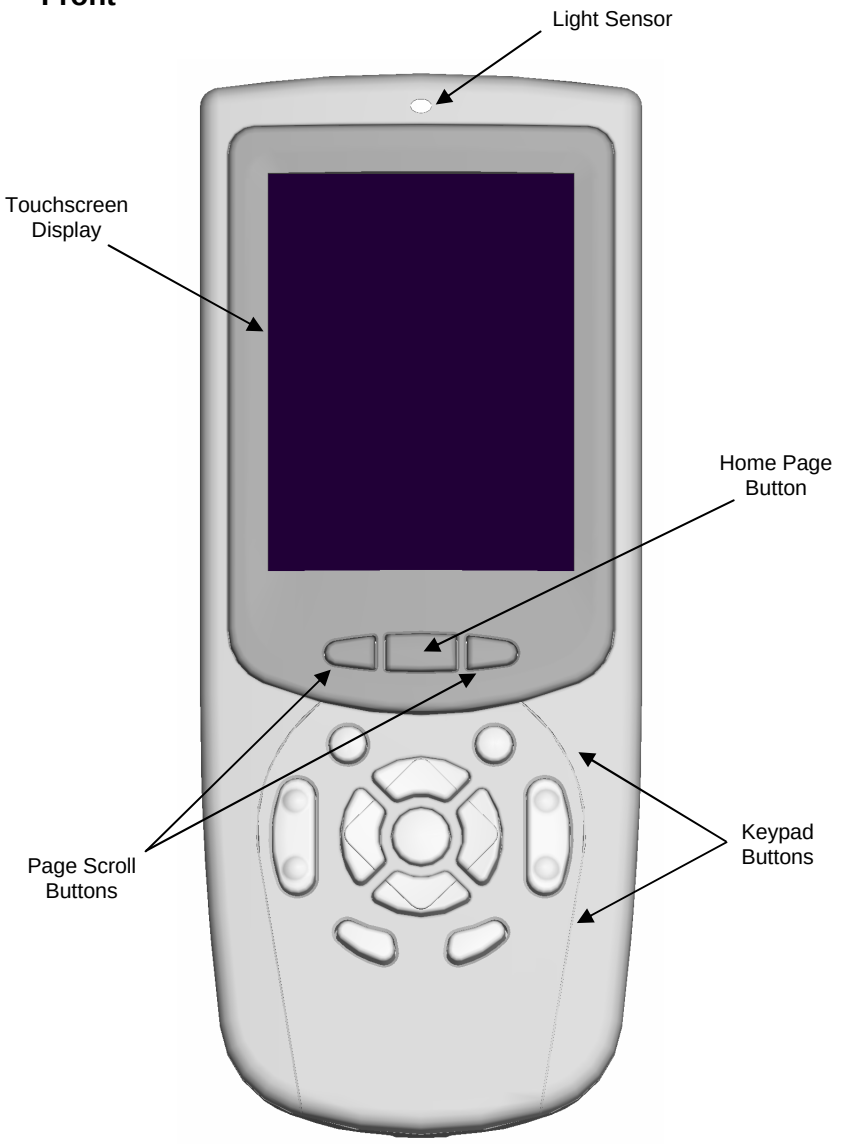


After power is applied, the *T3* will take approximately ten seconds to load the operating system, the application software, and the user program. This long delay only occurs from a power-down state. During normal use the *T3* turns-on instantly from its sleep mode.

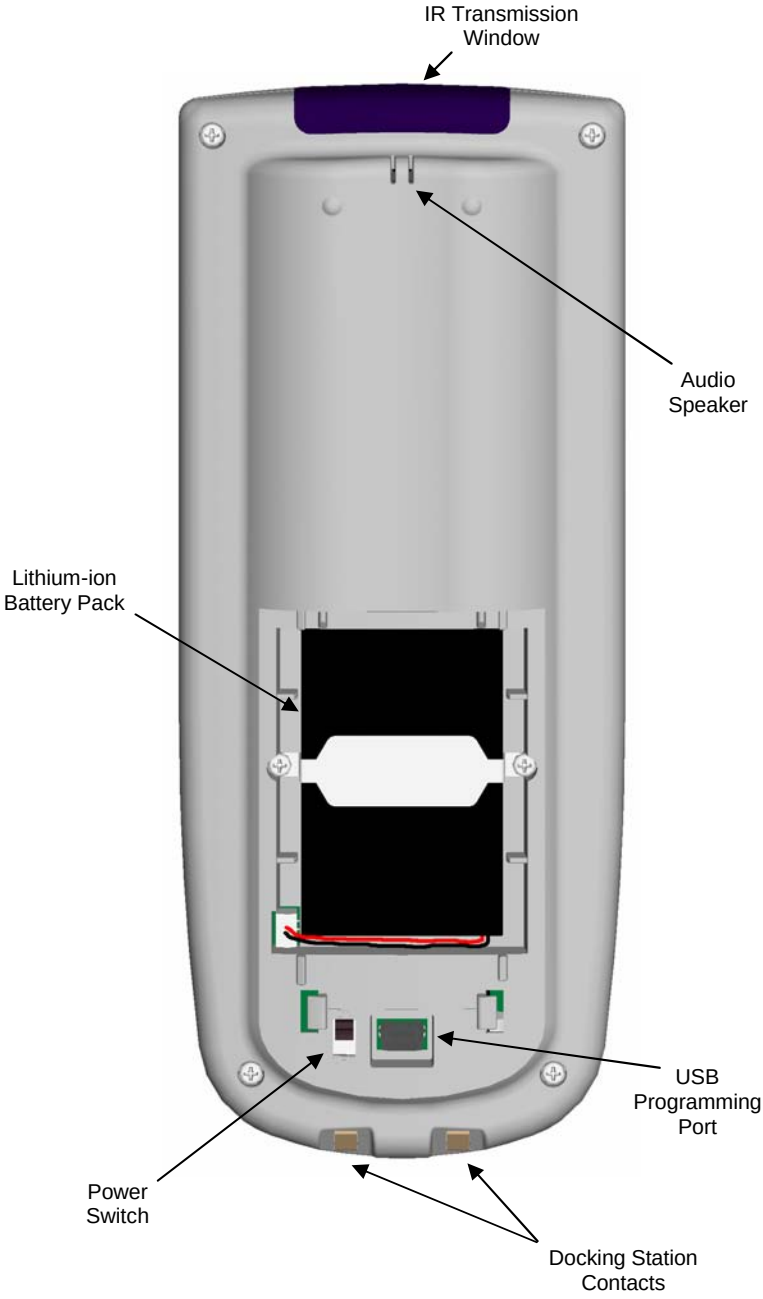
The *T3* is turned-on by touching any area of the display or any keypad button. If the tilt sensor is enabled, picking up the unit will also turn it on.

REMOTE REFERENCE

Front

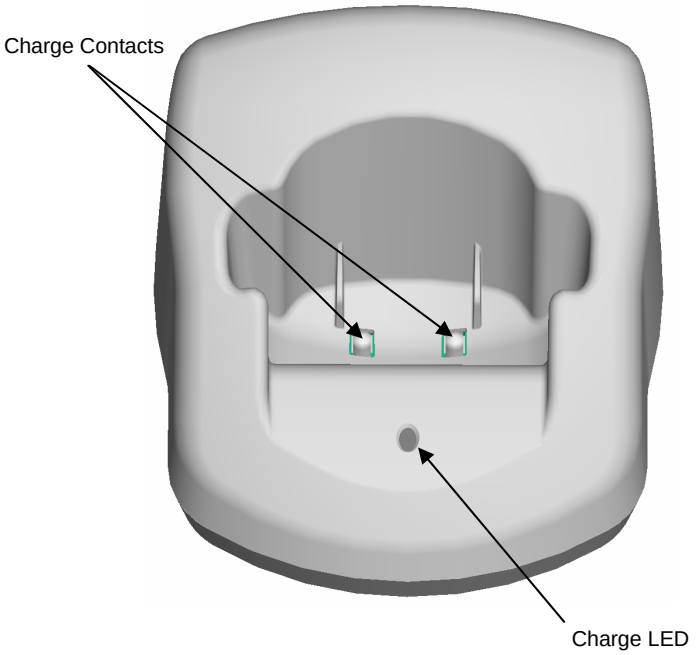


Back

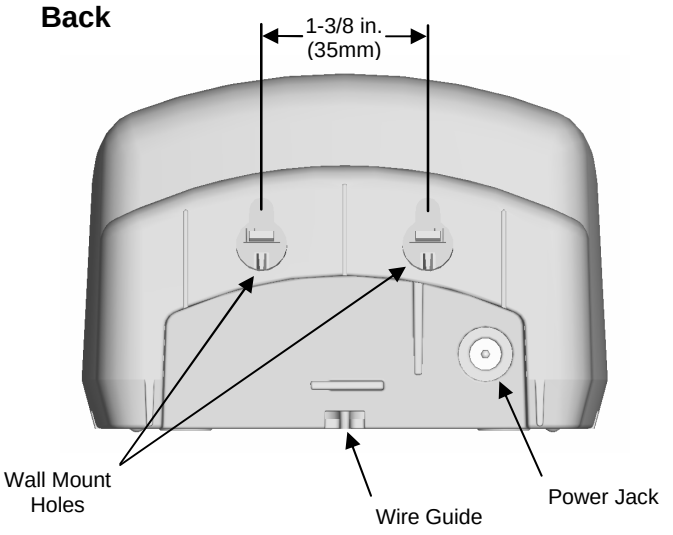

IR Transmission Window
Audio Speaker
Lithium-ion Battery Pack
USB Programming Port
Power Switch
Docking Station Contacts

DOCKING STATION REFERENCE

Front



Back



Chapter 3. Operation

THE TOUCHSCREEN DISPLAY

The *T3* touchscreen display is organized into a series of pages. Normally each page contains objects (buttons, text, graphics, etc.) that are related in some way. For instance, they may all display information necessary for controlling a particular DVD player.

By default, the *T3* has one *Home* page—all other pages are normally accessed from links on the Home page. In addition, any page can contain buttons with a link to any other page.

Normally the Home page is used to display the names of the A/V sources and other devices being controlled. The *T3* will support 200 pages including the Home page.

A representation of a programmed Home page is shown below:

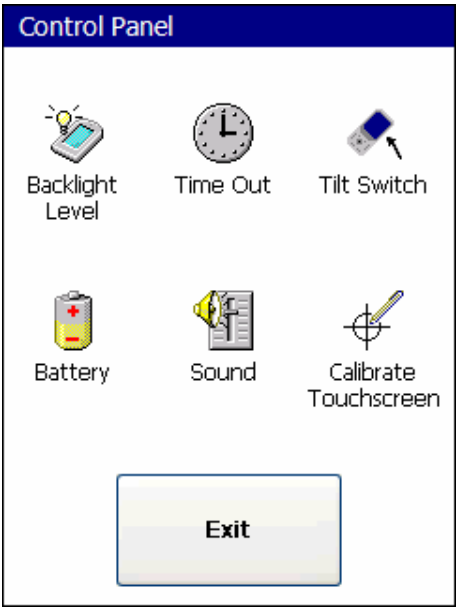
By default, pressing the HOME button at any time will return you to this page. It is possible, however, to program the Home button to behave differently if desired.

THE CONTROL PANEL PAGE

The Control Panel page can be displayed by first setting the *T3* power switch to the off position, and then pressing and holding the Home button while sliding the power switch to the on position.

You can also access the Control Panel page by assigning a "Control Panel" page link to a button using the *TheaterTouch Designer* software.

A representation of the Control Panel page is shown below:

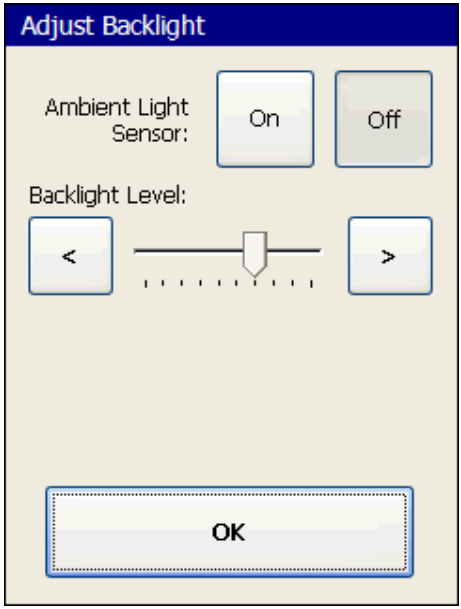


To return to the user program, either press Exit or the Home button.

BACKLIGHT LEVEL

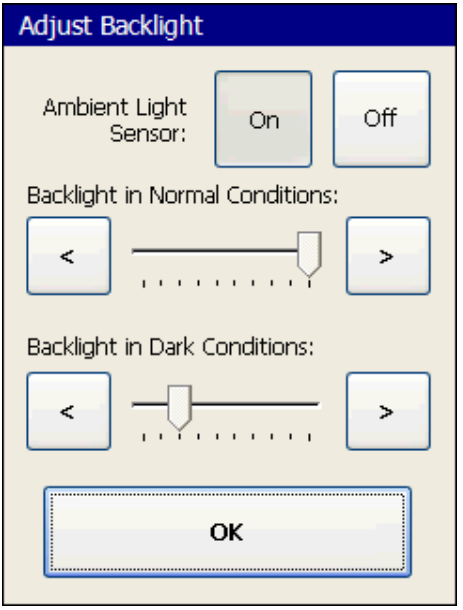
This button displays a window that allows you to adjust the backlight brightness and enable/disable the Ambient Light Sensor.

If the light sensor is disabled, there is only one backlight level to adjust. Press the left arrow or right arrow buttons to adjust. Press the OK button when finished.



With the light sensor disabled, the backlight brightness will always stay at the same level whenever the *T3* is turned-on.

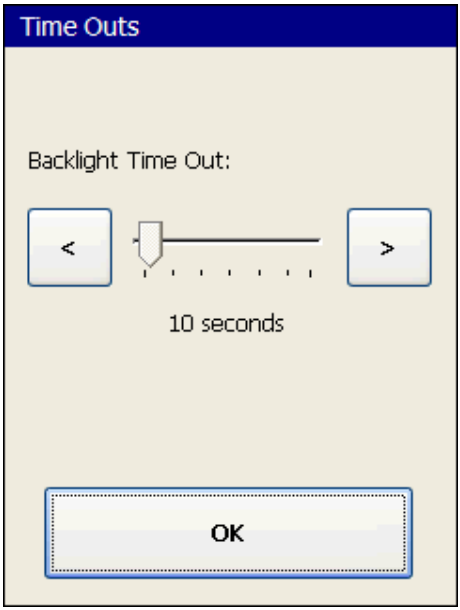
If the light sensor is enabled, there are two backlight levels to adjust. Press the left arrow or right arrow buttons to adjust. Press the OK button when finished.



With the light sensor enabled, the backlight brightness will automatically change between the two levels, depending upon the ambient lighting conditions.

TIME OUT

This button displays a window that allows you to adjust the amount of time the unit stays awake after the last button press. The time is variable from 1 second to 120 seconds (the default is 10 seconds). Press the arrows to the left or right of the Time Out setting to adjust the time. Press the OK button when finished.



This setting can have a significant effect on the run-time of the T3 between battery charges. During Sleep mode, the *T3* uses virtually no battery power.

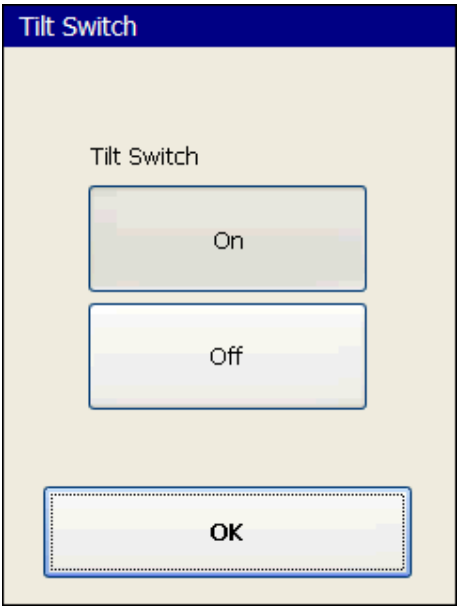
TILT SWITCH

This button displays a window that allows you to adjust the settings for the built-in tilt sensor. The tilt switch is a motion detector that turns the remote on when activated.

On means the tilt switch is active and will wake-up the *T3* when it is moved.

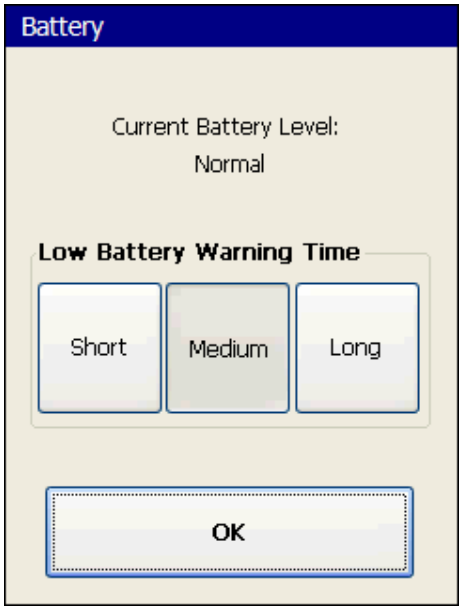
Off means the tilt switch is inactive.

Press the OK button when finished.



BATTERY

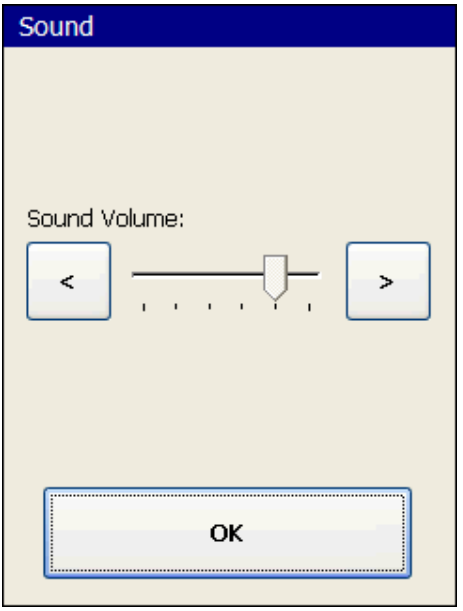
This button displays a window that allows you to adjust the relative amount of time that the low battery icon appears on the display. This setting will determine how much time you have between the appearance of the low battery warning and the battery becoming completely depleted. Press the OK button when finished.



The default warning time is Medium. Depending upon the age of the battery and your daily usage habits, it may be beneficial to adjust this time.

SOUND

This button displays a window that allows you to adjust the volume of the audible speaker. The speaker sound provides feedback that a button was pressed. Press the arrows to the left or right to adjust the volume. Press the OK button when finished.



There are six discrete volume settings. The lowest setting disables the speaker.

CALIBRATE TOUCHSCREEN

This button runs a routine that allows you to calibrate the touchscreen. Since it normally should not be necessary to calibrate the touchscreen, this routine is included as a precaution only.

> **Warning:** Do not attempt to calibrate the touchscreen with your fingertip. Proper calibration requires a stylus or other fine tip. Do not use metal objects such as ball point pens or screwdrivers that can damage the surface of the touchscreen.

Press the Calibrate button to continue.

Control Panel
Calibrate Touchscreen
If you do not have a stylus available, press "Cancel". Do NOT calibrate the screen with your fingertip.
Calibrate
Cancel
Exit

Follow the directions on the display to complete the calibration process.

PROGRAMMING THE T3

The *T3* is programmed using RTI's *TheaterTouch Designer* software. RTI dealers can download the software free of charge from:

www.rticorp.com/dealers

A PC running Windows® 98SE or higher with a USB port is required. The required USB cable is included with the RTI *IR-PRO* dealer kit.

Chapter 4. Troubleshooting

If you are having problems with your *T3*, please read these troubleshooting tips before contacting technical support.

If you continue to have problems, see Chapter 5 for more information on contacting RTI technical support.

DISPLAY IS DIM, BLANK OR UNREADABLE

Make sure the battery pack connector is attached properly and the battery is charged.

Try adjusting the backlight level from the **Control Panel** page (Refer to Chapter 3 for more details). By nature, the contrast of an LCD screen changes with temperature, so if the remote is cold the display will be dark and will return to normal as it warms.

USB COMMUNICATION PROBLEMS

Verify that your PC is running Windows® 98SE or higher.

Verify that the T3 USB driver was installed the first time the T3 was connected to your PC.

Verify that the T3 is present in the Device Manager within the Windows® Control Panel.

Make sure you are using the programming cable that was supplied by RTI and that both ends are connected securely.

Make sure the PC detects the presence of the T3. If it doesn't, unplug the USB cable, wait for about ten seconds, and plug it in again.

If the download fails after some data has been transferred, try re-sending the program.

IR CODE PROBLEMS

If you are using an IR repeater system, make sure it is working correctly with the original OEM remote. If not, you will need to troubleshoot the IR repeater system.

If you are still having problems, try adjusting the IR code "Minimum Repeats" value in the *TheaterTouch Designer* programming software.

If the IR code is executed inside a macro that contains multiple IR codes, try inserting a small time delay before the problem code. If there already is a delay, try increasing it.

Chapter 5. Service and Support

UPDATES AND NEW PRODUCTS

For news about the latest updates, new product information and accessories, please visit our web site at:

www.rticorp.com

CONTACTING REMOTE TECHNOLOGIES INCORPORATED

For general info, you can contact RTI at:

Remote Technologies Incorporated
Tel. (952) 253-3100
Fax (952) 253-3131
info@rticorp.com
www.rticorp.com

RTI TECHNICAL SUPPORT

At RTI, customer service and satisfaction is an utmost priority. If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance.

RTI provides technical support by telephone, fax or e-mail. For the highest quality service, please have the following information ready, or provide it in your fax or e-mail.

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.

If you are having a problem with software, please note what version you have installed, the operating system on your PC, a description of the problem, and any troubleshooting you have already tried.

If you are calling about a software or programming question or problem, please be at you computer when you place your call. This will considerably speed up the troubleshooting process.

For **Technical Support** or assistance with your RTI product, contact RTI at:

(952) 253-3137

support@rticorp.com

www.rticorp.com/support

For questions regarding **Service or Repair** of your RTI product, contact RTI at:

(952) 253-3136

service@rticorp.com

www.rticorp.com/service

Please do not return products to RTI without return authorization.

Specifications

Power	3.6 VDC, 1300 mAH Li-Ion Battery Pack
Power Management	Automatic On/Off (tilt switch)
Infrared Control Range	30 Feet (9.1m) @ 60 Degrees
Infrared Frequency Range	15kHz – 460kHz
Radio Frequency Control Range	Up to 100 Feet (30.5m) (with optional receivers)
Radio Frequency Carrier	433MHz
Operating Temperature	+32°F to +122°F (+0°C to +50°C)
Operating Humidity	5% to 95% Non-condensing
Display	High-brightness color TFT ¼ VGA (240 x 320 pixels) Supports 16-bit (65K) color
Touchscreen	High-resolution resistive
Display size	3.5 in. (89mm) diagonal
Backlights	White LED (Display) Blue/Amber LED (Keypad)
Nominal Run Time on Full Charge	3½ hours min. continuous (5 - 7 days average use)
Standby Time on Full Charge	30 Days

Battery Charge Time	3-4 Hours
Total System Memory	32MBytes Flash (non-volatile)
Device Capability	Total number of devices limited only by memory
Macro Capability	Up to 64 steps per macro Total number of macros limited only by memory Macros allowed on every button
Communications	USB programming port
Dimensions	Length: 7.6 in. (193mm) Width: 3.1 in. (79mm) Height: 1.1 in. (28mm)
Enclosure	High-impact molded ABS plastic.
Weight	7.4 oz. (210g) with battery pack
Warranty	One Year Parts & Labor (90 days on battery pack)

All specifications are subject to change without notice.

It's Under Control ®

Remote Technologies Incorporated
7651 Anagram Drive
Eden Prairie, MN 55344
Tel: 952-253-3100
Fax: 952-253-3131
www.rticorp.com

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